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Internet 'is like the modern wild west'

The government should get tough on internet crime to allay the fear of users, according to the House of Lords' Science and Technology Committee. It says users are more concerned about being robbed electronically than they are about being mugged, and that online confidence has been undermined by the relaxed attitude of the government and businesses to so-called e-crime.

Chairman of the committee, Lord Broers, said: "At the moment it seems that the internet is increasingly perceived as a sort of 'wild west', outside the law. People are said to fear e-crime more than mugging. That needs to change, or else confidence in the internet could be destroyed."

The responsibility for protection against viruses, phishing attacks (where users are duped into visiting fake websites to enter their login details for services such as online banking), spyware and other scams has long been a subject of debate. PC manufacturers, ISPs and other services have long resisted the suggestion that they are responsible for securing users against online criminals. However, the vast majority of the public is not capable of fending for themselves on the internet.

"You can't just rely on individuals to take responsibility for their own security," said Lord Broers. "They will always be outfoxed by the bad guys. We feel many of the organisations profiting from internet services now need to take their share of the responsibility. That includes the IT industry and the software vendors, the banks and internet traders, and the internet service providers."

But will creating new laws to secure the internet work? Currently the law provides cover for electronic crimes and local police forces are responsible for handling complaints, some of which may be escalated internally to the Serious

Organised Crime Agency (SOCA). SOCA in effect replaced the National High Tech Crime Unit (NHTCU), which used to handle electronic crimes. There is no way for members of the public to report electronic crimes directly, and only the most serious offences will catch SOCA's attention.

Lord Broers doesn't believe that new laws will solve the problem, but instead wants the government to introduce funding and incentives to encourage the industry into providing better protection. "You can't legislate for better internet security," he said, "but the government can put in place incentives for the private sector to up their game. And they can invest in better data protection and law enforcement. It's time to act now, before it's too late."

The Lords committee also suggests that hardware manufacturers and software developers should be liable for security flaws in their products. This could allow victims of a virus, which damages files by exploiting a security hole in Windows, to have legal redress from Microsoft.



▲ Members of the House of Lords' Science and Technology Committee called for more government protection for internet users

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Sony uses 'rootkit' to hack PCs – again

Sony has used a technology in one of its products that relies on similar techniques to those employed by hackers. The Sony MicroVault USM-F is a flash drive that includes a biometric protection device, namely a fingerprint recognition scanner. According to security firm F-Secure, the software that comes with the drive creates a hidden folder using 'rootkit techniques'.

Rootkits are usually malicious programs that lie hidden on a PC. While F-Secure suspects that Sony's rootkit-like software is hiding fingerprint authentication, which seems a sensible reason to hide data, the company noted that the system can be

abused: "This new rootkit... can be used by any malware author to hide any folder." McAfee has also analysed the software and demonstrated how it can be used to cause problems on a system.

This is not the first time that Sony has been found to use controversial data-protection techniques. In November 2005 F-Secure discovered that some music CDs from the company automatically installed copy-protection software on Windows PCs. This software hid itself and unintentionally created a security hole that virus writers attempted to use to hide their own programs.


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Laser printers 'can kill'

Laser printers pose the same health risks as passive smoking and can cause respiratory irritation, cardiovascular problems and cancer, say scientists. Australian researchers from the International Laboratory for Air Quality and Health tested the emissions from 62 laser printers and found that 27 per cent dispersed hazardous levels of particles. Particles less than a micrometre wide are so fine that they can enter the lungs unfiltered.

Lidia Morawska, the author of the study, said: "Particles have been shown beyond any doubt to be a health hazard." She added that their research had found indoor levels of pollution



▲ Printers from HP's LaserJet 4050 range emitted no particles, in contrast to other laser printers

during office hours to be three times higher than outside in the worst cases.

Not all laser printers are a threat, however. The study found that eight printers from the HP LaserJet 4050 series of models and four Ricoh Aficio models gave off no dangerous emissions at all. Interestingly, when testing identical models some were found to emit particles while others did not. Neither did the study look into actual health risks other than the size of the particles. To be on the safe side, Morawska suggests placing laser printers in a well-ventilated area.

HP has dismissed the report's health claims, adding that there is no known link between ultrafine particles and health risks. "HP does not agree with [the report's] conclusion or some of the bold claims the authors have made recently in press reports," said Tuan Tran, HP's vice-president of marketing for supplies.

He added that the study of such tiny particles is a very new area of research and that little is known about the difference between printer emissions and those of more common household objects. "Currently, the nature and chemical composition of such particles, whether from a laser printer or from a toaster, cannot be accurately characterised by analytical technology," Tran said. The company is currently conducting its own research into ultrafine particles.

PC World withdraws free notebooks

PC World has withdrawn a deal that offered a free notebook PC to new broadband subscribers after less than one month.

The promotion, which was announced and widely reported on 18th July, was quietly terminated some time before 16th August. The original offer's webpage now says: "We're sorry. This deal has now ended. You can still take advantage of our great laptop deals at PC World."

When the company launched the offer it did not indicate that it was time-limited. Spokesperson Hamish Thompson told *Computer Shopper* that the deal was a "victim of its own success". He claimed that PC World had allocated "tens of thousands" of notebooks to be given away, but that they had all been used up within weeks.

Subscribers had to sign up to a two-year 2Mbit/s Orange broadband service, costing £15 per month, in a PC World store. Following a 10-day period, during which the subscriber's bank details would be checked, a voucher for a fairly low-powered notebook PC worth £300 would then be sent in the post. PC World has replaced the offer with a discount on more expensive notebooks. The company gave no indication how long this offer will be available, though.

Evesham goes into administration

New company promises to maintain support and warranty cover for existing customers

British PC company Evesham Technology Ltd has gone into administration, resulting in the loss of 150 jobs. The company's managing director blamed its financial problems on the government, after it withdrew the Home Computing Initiative (HCI) with very little notice. Evesham claims that it had committed a lot of resources to the HCI scheme before having the rug pulled out suddenly by Gordon Brown.

A new company, Geemore Technology, is now trading using the Evesham Technology name. Geemore is a joint venture between Richard Austin, previously Evesham Technology's managing director, and two former directors of Granville Technology, the former owner of Time Computers.

This follows a financial arrangement whereby another company, PCC Technology, provided funding to Geemore to buy Evesham's assets from the administrators. Essentially this means that Geemore owns Evesham's assets but inherits none of its financial responsibilities. Austin is now head of Geemore.

Austin claimed that Evesham Technology Ltd required too much investment to keep going but that the new arrangement would ensure that

current customers would continue to receive support and warranty cover. He added that Geemore was a temporary name currently trading as Evesham Technology under licence from PCC Technology.

Since Evesham Technology went into administration, computer processor

manufacturer AMD has ceased dealing with the company. This means the new company will now have to buy processors indirectly and will no longer have access to early samples and details of planned releases. A significant percentage of Evesham's PC product line consisted of AMD-based systems.



The Evesham Technology name will be continuing under new ownership

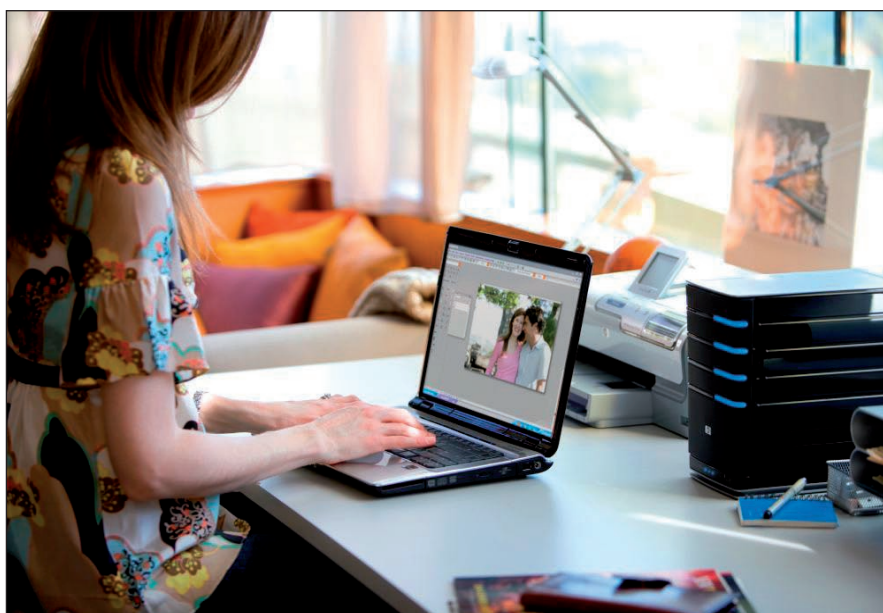
Windows Home Server is ready to go

Microsoft's new home operating system will be launched within weeks. Windows Home Server, which has been designed to run a domestic centralised server, was announced earlier this year and is scheduled to appear before Christmas 2007.

Some websites speculated that the official launch date has already been and gone and predicted that Windows Home Server (WHS) should have arrived by 27th August. However, Microsoft told *Computer Shopper* that this date – given on the company's Support Lifecycle webpage – was not accurate. The Windows Home Server blog also denied that the date was for the official launch of the product, dismissing reports to the contrary by some websites and claiming that "the date refers to when tech support goes live for system builders".

However, the system builder version of WHS has been finalised and was released to manufacturing in July. *Shopper* predicts that new home servers featuring WHS will start to appear in September.

Microsoft Windows Home Server's main role is to share data with PCs on your network and remote PCs over the internet. Users will be able to log into their home server remotely using a combination of their unique Windows domain name and Microsoft's homeserver.com internet domain. For example, Fred Smith might log into



▲ Windows Home Server allows users to share music, video and photos over a home network

fred_smith.homeserver.com, if he's lucky enough to bag the fred_smith subdomain.

The WHS operating system is based on Windows Server 2003, although it is expected to be easier to use for those unfamiliar with Active

Directory. It will support different versions of Windows XP and Vista as clients, including XP Home Edition SP2, XP Media Center and Windows Vista Home Basic. By default PCs are fully backed up automatically each night.

Hardware firms join home server rush

Hardware manufacturers have started to produce home servers pre-installed with Windows Home Server (see above). Fujitsu Siemens Computers has already demonstrated its new multimedia Scaleo Home Server to *Computer Shopper* at the IFA consumer electronics show in Berlin. Designed to act as a central resource for your digital music, video and photos, the Scaleo server can run without a monitor and uses very little electricity.

As we reported last month, home users are notoriously bad at backing up their files. One of the main tasks for Windows Home Server is to provide a place to save backups. The Scaleo Home Server comes with two 250GB hard disks set up in a mirrored array so that, should one fail, the other has a full copy of your files. Two additional internal SATA drives can be added to increase storage, although this would increase the power consumption.

Fujitsu Siemens claims that the server consumes as little as 50W of electricity and comes with the Energy Star

4.0 certification, which demonstrates a device's energy efficiency. The company also claims that the server is "near silent in operation".

The official word is that the Scaleo Home Server will be available "towards the end of 2007". It will cost around £499.

HP is also planning a launch of a Windows Home Server product. Its MediaSmart Server was the first such device to be announced earlier this year. A release date is yet to be officially confirmed but Amazon.com has listed two models along with prices. If we don't see these AMD-based systems available for around £300 for 500GB of storage and £380 for 1TB of storage by the end of September, we'll be surprised.

Amazon.co.uk's listings are devoid of Windows Home Server products at the time of writing, save for *Windows Home Server for Dummies* (due on 31st December) and *Windows Home Server User's Guide* (due on 1st October).



▲ Fujitsu Siemens' low-powered, "near silent" Scaleo Home Server

Windows timeline Twenty-five years of Microsoft's operating system

Windows 1.0 was released in 1985, succeeded in 1986 by version 2.0 and Windows/286. They provided a basic GUI running on top of MS-DOS. MS-DOS 4.0 was released in June 1988, followed by version 5.0 in June 1991. This is still used as the Virtual DOS machine in 32-bit versions of Windows Vista.



Windows 3.0 introduced a 32-bit protected mode kernel, adding multitasking. Windows 3.1 arrived in 1992, followed by an update called Windows 3.11 for Workgroups. This added network features, then considered to be advanced. Windows 3.1 and later supported TrueType fonts.



Windows 95 was launched when the internet was taking off. It included TCP/IP networking as an installation option, although the original release lacked a web browser. It also introduced the Start menu. Later releases added Internet Explorer and support for USB and FAT32.



By 2000 Microsoft had released variations of Windows 95, including 98 and Me. Windows 2000 was supposed to be a major upgrade, but was superseded by Windows XP in October 2001. In 2005 Microsoft released its first consumer 64-bit OS, Windows XP Professional x64.



By January 2007 users could upgrade to Windows Vista, which Microsoft claimed was significantly more secure than previous versions. Windows Home Server is scheduled for release by the end of 2007. The next version of Windows is codenamed Blackcomb. It is not expected earlier than 2010.



1985

1990

1995

2000

2010



Police armed with BlackBerry

Mobile smartphones will give officers more time on the beat

Bedfordshire Police is arming its officers with BlackBerry smartphones in an effort to keep cops on the beat and out of the office. The handheld devices allow officers to check their daily briefing notes, including photos of wanted suspects, as well as providing a connection to the Police National Computer (PNC).

Inspector Jim Hitch told *Computer Shopper* that the existing police radio system can become so busy that officers wanting to query the PNC, such as when searching for information on car registration plates, have to wait for a time slot or return to the office. The customised BlackBerry system allows officers to send such requests immediately. Officers will also be able to access the warrants database remotely.

Using a remote computer to process and submit reports will reduce the time officers spend in the office. "Up until now we have computerised everything but mobilised nothing," Inspector Hitch said. "We used to fill in forms and bring them into the office at the end of the shift. When the system became computerised we had to visit the office more often." Now the BlackBerry devices allow officers to send in important



Police in Bedfordshire can now access the Police National Computer via their BlackBerries

information while out and about. "Anecdotally, this saves each officer around half an hour to an hour each day," he said.

The system is capable of handling data classified by the Communications-Electronics Security Group (CESG) at the 'restricted' level. The CESG is the UK Government's National Technical Authority for information

assurance. But what happens if a hoodie grabs an officer's posh mobile phone and legs it? "In those situations we can zap and kill them," said Hitch. "The BlackBerry, not the thief."

Currently 600 BlackBerry units have been deployed, and the final number will be around 1,100. So far only the Bedfordshire force is using smartphones to connect officers.

Mobile broadband speeds up

Mobile broadband looks set to speed up with new services from the major mobile phone companies. Vodafone has started to upgrade its network to provide internet access at speeds of up to 5.5Mbit/s, which is around 14 times as fast as 3G. The upgrade, which involves using high-speed uplink packet access (HSUPA) technology, will begin in central London and major airports.

Although technically capable of 5.5Mbit/s downloads, users are expected to experience speeds of 1.7Mbit/s upwards. Upload speeds will rise to 1.44Mbit/s. Access to the network will be provided to notebooks equipped with a supplied USB or PC card modem.

Mobile provider 3 has also launched a new mobile broadband service. Its Turbo network provides download speeds of up to 2.8Mbit/s. It is available with 12- and 18-month contracts, and the required USB modem is free for existing 3 customers. It will initially be available only in northern England ("north of Birmingham", according to the company), Scotland, Northern Ireland and inside the North and South Circular roads in London. More comprehensive coverage of southern England is expected by the end of the year.

An arresting WiFi incident

If you think it's OK to borrow your neighbour's wireless broadband connection, think again. A 39-year-old man has been arrested for connecting to the internet over an unsecured wireless network. He was detected by two community support officers, who observed him using a notebook PC while sitting on a wall outside a house.

The man, who was allegedly accessing the web via an unsecured wireless network located at the house, was arrested and released on bail pending further investigation by the Metropolitan Police's Computer Crime Unit.

Detective Constable Mark Roberts said that, although the arrest was not part of a crackdown on these types of crimes, the police are taking the offence seriously. "This arrest should act as a warning to anyone who thinks it is acceptable to use other people's broadband connections illegally. To do so potentially breaches the Computer Misuse Act and the Communications Act, so computer users need to be aware that this is unlawful and police will investigate any violation we become aware of."

Last April a man in Redditch was cautioned for a similar offence, while in 2005 Gregory Straszkiwicz was caught abusing a wireless broadband connection. He pleaded guilty to dishonestly obtaining an electronic communications service and possessing equipment for fraudulent use of a communications service, and was fined £500.

Straszkiwicz had been found standing outside a house using a notebook PC, allegedly not for the first time. His was thought to be the first case of its kind in the UK.

IN BRIEF

SIGNS WARN DRIVERS TO IGNORE SATNAV

The first official road signs to warn drivers about the dangers of trusting their satellite navigation devices have been introduced in a Welsh village. Authorities in rural St Hilary, in the Vale of Glamorgan, have ordered the signs to help avoid problems in trouble spots. They hope to deter lorry drivers from entering a narrow road often used by GPS routes. Further signs could follow if the trial works out.

QUARTER OF BRITS HIT WITH VIRUS

Almost a quarter of internet-connected Britons have suffered from a computer virus attack in the past year, according to figures from the Office of National Statistics. Asked if their computer had been affected by a virus in the past 12 months, 23 per cent of respondents claimed it had. The relatively high figure could be explained by people confusing viruses with general computer faults.

ACER SNAPS UP GATEWAY

Acer is buying Gateway in a deal that will make the company the world's third largest PC manufacturer. In turn Gateway claims that it will attempt to buy the parent of Packard Bell BV, which is popular in Europe and is the world's 18th largest PC company. The Gateway brand will be used in the US. Currently HP and Dell remain the two largest PC companies.

FLIGHT SIM HIDDEN IN GOOGLE EARTH

A secret flight simulator has been discovered in the latest version of Google Earth. The hidden feature lets users fly an F16 or slower SR22 propeller aeroplane over the Google Earth landscape. The graphics use the detailed satellite photography for which the program is renowned. You can access the planes by pressing Ctrl-Alt-A, although we had to use the Windows key instead of Alt.



IN BRIEF

MICROSOFT DEVELOPS DOUBLE-SIDED TOUCHSCREEN

Microsoft has designed a touchscreen that can be operated by touching the back, leaving the top surface of the screen clearly visible to the user.

The LucidTouch prototype is a clunky affair that uses a webcam to track where fingers are located. Further developments should be more compact, and may possibly involve using light sensors.

A company spokesperson said: "Think of a smart wrist-watch featuring a touchscreen. If you used your finger on that touchscreen your fingers would occlude the entire display. Using LucidTouch, you would instead move your finger round the back of the wrist band, yet the translucent overlay would map your finger motion on to the screen."

SOUTH-WEST IS THE MOST WIRED IN UK

According to the Office of National Statistics, the South-West has joined London as containing the most internet-connected households. Both regions can boast that 69 per cent of homes are online. London has more broadband customers, however.

Northern Ireland, the North-East and Yorks & Humber had the fewest internet users.

APPLE SELLS US TV SHOWS IN UK STORE

Apple has begun selling US television programmes through the UK iTunes Store. Shows from ABC Studios, Disney, MTV Networks, Nickelodeon and Paramount Comedy are now available for £1.89 per episode. They include *South Park*, *Lost*, *Grey's Anatomy* and *Ugly Betty*. UK series such as MTV's *Barrio 19*, Nickelodeon's *Genie in the House* and Paramount Comedy's *Comedy Blue* are also available.

SONY KILLS ONLINE MUSIC STORE

In a bid to make its portable digital music players more compatible, Sony is to support Windows Media file formats and will shut down its own music service, which is based on the proprietary ATRAC audio format. The Connect Music Service will be phased out from March 2008.

Monster mashed



Trojan steals personal details of thousands of users

Hackers have targeted the Monster.com recruitment site, stealing the personal details of hundreds of thousands of registered users. A Trojan known as Infostealer.Monstres was found to be accessing the recruitment site using recruiter's details, filtering data out of user records and uploading the stolen information to a remote server.

When security firm Symantec analysed this low-profile Trojan it discovered the location of the remote server. Researchers found that it contained a cache of 1.6 million records, representing the full names, email addresses, home addresses and phone numbers of hundreds of thousands of users.

Symantec noted that this illicit database is "a spammer's dream" and found that the Trojan is also capable of sending spam itself. Owning a large database of accurate personal information would also make it easy to send convincing phishing emails.

Perhaps it is no coincidence that there have been reports of phishing emails purporting to come from Monster.com. Symantec said: "These emails were very realistic, containing personal information of the victims. They requested that the recipient download a Monster Job Seeker Tool, which in fact was a copy of

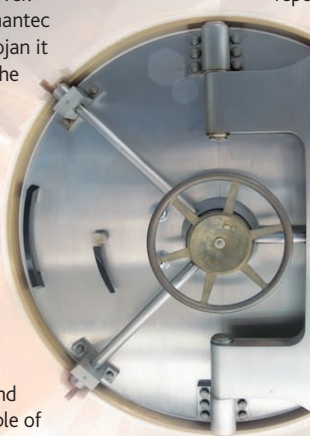
Trojan.Gpcoder.E." This Trojan contains a file also used by Infostealer.Monstres.

Monster.com sent *Shopper* a statement that claimed the security breach was not of its own security systems but was rather an abuse of existing customer credentials. "Monster is investigating the reports related to a piece of malicious software – called Infostealer.Monstres – that has been used to gather the login credentials of our legitimate customers, and use those credentials to log into Monster's resumé database in order to view resumes posted to Monster's resumé database."

"To the best of our knowledge, this is not a 'hack' of Monster's security – rather, legitimate customer credentials are being used to log in to the database," said Patrick W Manzo, vice-president of compliance and fraud prevention at Monster.

Since the initial attack, a second security compromise has been discovered. This resulted in the leak of more personal details, although the company claims to have no idea as to how many have been stolen.

Monster has come under fire for failing to alert customers of the attack for five days after it was first made aware of it. Its servers contain around 73 million CVs, making it an attractive target for would-be identity thieves and other internet scammers.



Forged email lands barrister in hot water

Bruce Hyman, a barrister and well-known TV and radio producer, has been found guilty of perverting the course of justice after he forged an email to falsely incriminate his client's adversary. Hyman used the internet connection in a shop in Tottenham Court Road, London, to hide his tracks when sending a fake legal judgment that appeared to support the case of his client's former husband.

When the man presented the fake judgment in court, Hyman denounced it as a forgery, according to a report in *The Observer*. The email appeared to have come from the Families Need Fathers charity and indicated that the organisation supported his claim for increased access to his daughter.

Facing a charge of perverting the course of justice himself after being accused of forging the document, the father investigated and traced the email back to a server in Manchester. The trail then lead to the London shop, which was able to provide CCTV footage of barrister Hyman logging on.

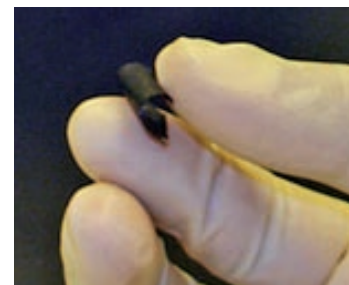
New batteries are thin and sweet

Scientists have designed a new type of battery that is paper thin, can be moulded into any shape and can even be trimmed with scissors. A prototype of a design created by researchers at the Rensselaer Polytechnic Institute (RPI) in the US demonstrates how the future might involve printing batteries.

The cell is made up of paper infused with electrolyte, into which carbon nanotubes are inserted. The tubes are the electrodes, the paper is the separator and the electrolyte allows the current to flow. The addition of a lithium and aluminium foil creates a lithium ion rechargeable battery. Professor Robert Linhardt of the RPI claims that a 100g sheet could replace a 1,300mAh battery.

Sony has also been working on an alternative power source.

Researchers at the company have designed a sugar-based battery that can generate enough power to run a music player and speakers. The environmentally friendly prototype runs on a sugar solution. The battery's case is made from a vegetable-based plastic and enzymes are used to convert the sugar into power. So far the cells have been able to generate 50mW.



▲ US scientists have developed a pliable, paper-thin battery that can even be cut with scissors



Over-50s take over the net

'Silver surfers' and women lead massive increase in Britons' online use

More British women and people over 65 are using the internet, dispelling the notion that the web is dominated by young, nerdy men. A report from Ofcom has found that an increasing number of over-65s are accessing the internet and are spending an average of 42 hours online each month. It estimates that a quarter of all internet users are over the age of 50.

The UK payments association APACS has found that older users are also increasingly using online banking services. Over the past six years the total number of online banking users has risen by 174 per cent. However, among the over 50s the increase is 350 per cent. Sandra Quinn, director of communications at APACS, said: "Our research shows that more and more people are turning to the internet rather than the phone to manage their finances. While younger people continue to make up the majority of online banking users, the greatest proportion of new internet bankers are the over 55s."

While the younger generation are also spending long periods of time online, the old cliché of young, male geeks seems to have died. Of those aged 25-34 years old, it is women who are spending the most time logged on.

According to research from the European Interactive Advertising Association (EIAA), 62 per cent of women with children aged up to 18 regularly access the internet. This is a nine per cent increase over 2005. Popular reasons for going online include researching health issues and shopping.

Despite consumer fears of internet crime (see *News*, page 10), the number of UK online shoppers has dramatically increased. In July 2007 consumers spent £4.2bn in online shops, according to the Interactive Media in Retail Group (IMRG). This was 80 per cent more than the same period last year.

Ofcom claims that an individual's average daily internet use has increased to 36 minutes in 2006, up 158 per cent since 2002. This represents around 18 hours a month. As the over-65s are spending over twice this amount of time online, today's internet addicts are the so-called silver surfers, not maladjusted young men.



NEWS ANALYSIS

The average family: more PCs than kids

Computers were once toys for hobbyists and tools for scientists. Now nearly everyone has one, which sounds exciting, futuristic and empowering, but is our growing reliance on the internet and desktop operating systems a good thing? Does the added convenience of online shopping, banking and other services outweigh the technical problems and threats that over 90 per cent of households now face?

Before we bombard you with statistics, let's try to make them meaningful by plotting out the landscape. There have been many surveys conducted that estimate how many households have at least one PC. *Shopper* surveys its readers regularly (watch out for the next reader survey in next month's issue) and asks readers how many PCs they have. Most of you have at least two, not including games consoles such as PlayStations, but we'd expect that. *Shopper* readers are more interested in technology than 'normal' people.

BT's latest Digital Living Report asked over 1,000 parents, aged between 18 and 70, about their attitudes towards new communications technology. Judging by some of their answers, they do not have the same technical knowledge as the average *Shopper* reader. Nevertheless, the research found that more family households own a PC than a bicycle, Bible or encyclopedia. Not only that, but now even non-expert families own over two computers (2.6, if you include games consoles).

Currently the average total fertility rate per couple in the UK is 1.84, and this figure has been running below 2.0 since the early seventies. This could mean that, if BT and *Shopper* are correct, the average home contains more PCs than children to play with them. But most people are not using PCs solely as games machines, according to BT. Email and online shopping, banking and holiday booking appear to be the most common uses, with nearly a third of homes using wireless (despite the scaremongering by the BBC in its recent *Panorama* programme).

If using internet-connected PCs makes life easy, what's the problem? One significant issue is that computers are complicated, despite the pleasant, easy-to-use interfaces that have made them accessible to non-experts. Their hardware and software can fail, as can the devices used to establish internet connections and the internet connection itself. Troubleshooting these problems is well beyond most people's capabilities. BT found that most people wanted better technical support for their computers. Interestingly, gender stereotypes were inverted and more men than women admitted to wanting more help.

Despite this, we trust these computers to store our priceless personal data. BT's research found that 40 per cent of people considered their data, including digital photos, as being "priceless", and yet a significant portion – 16 per cent – never back up. It would be interesting to know how regularly those who do back up update their archives.

Let's not forget the problems posed by those cheeky hackers who zoom around the internet spreading viruses and other nasty things. Or the perverts on chat forums and social networking sites. Most of the parents interviewed by BT were aware and concerned about these threats, but it's not stopping them logging on and bunging their credit card details at trusted online shops.

The internet services that we come to rely on are, as with anything else, far from perfect. If you rely on email or VoIP for communication, you will experience problems every so often – and more frequently than if you use a standard phone and the Royal Mail. Physical junk mail rarely matches the amount of spam email most people receive and VoIP services do fail occasionally.

Skype's cheap internet phone call service became unavailable recently for two days due to a bug. And try making an emergency phone call using a VoIP service during a power cut. Unless you have an uninterruptible power supply on your phone and internet router you'll have to dig out your old, regular phone. Let's hope you remember where it is.

Allowing flaky hardware, software and services to form the core of our lives might be risky, but we derive some touching benefits from the types of communication it provides. Most people who spoke to BT found that new technology made it easier for parents to bear the sadness of parting when children leave home. Finally, perhaps, Mum and Dad can take their turn on the computer.

Simon Edwards

Web developer and security expert

IN BRIEF

PAY WITH YOUR PHONE

A new payment system has been launched that will allow mobile phone owners to buy items for £10 or less. The PayForIt scheme, which is supported by the five main mobile phone companies, essentially turns a phone into a digital wallet. The system makes it easy to buy items such as ringtones, train tickets and products from web stores. It is intended to replace premium rate text message billing, which many users do not trust.

PC WORLD OFFERS FREE CHECKS FOR FAMILIES

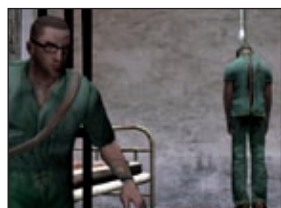
High-street computer retailer PC World is to offer a free security check on all PCs sold to families. Concerned parents can opt to have PC World's TechGuys staff configure Windows Vista's built-in parental controls system, as well as tinker with the pre-installed Norton 360 internet security software. All changes to the system configuration are made in consultation with the parent.

BOFFINS ATOMISE MOVIES

Scientists have discovered a way to cram 30,000 full-length movies on to an iPod-sized gadget. The IBM researchers have worked out how to steer single atoms, opening the route to creating very small storage devices. The end result could be a personal movie player capable of holding every film you could ever want – and more – in much the same way as iPods already hold more music than you could ever like.

MANHUNT 2 WILL BE RELEASED

Manhunt 2, the violent computer game that was the first to be banned in the UK in the last decade, will be launched in the US in October. A modified version has been classified with a 'Mature' rating. Previously it was 'Adults Only', which amounts to a ban as Sony, Nintendo and Microsoft will not supply games with that rating.



Plague kills gamers but helps scientists

Spread of online diseases could predict real-life behaviour

Studying the behaviour of online gamers during a virtual crisis can be used to help reduce the impact of disasters in real life. A report in *The Lancet Infectious Diseases* claims that online games provide clues as to how real people react to real problems. It refers to a plague in the online game World of Warcraft, in which the characters of thousands of players were killed by a 'corrupted blood' disease.

The disease was intended to be a special effect, localised to a particular area of the multiplayer online game, but a bug in the software meant that it was accidentally introduced to the virtual world at large. As the plague spread, decimating the population of a number of cities, players commanded their characters to behave in interesting and different ways. Some ran away from the danger areas, others investigated out of curiosity while the infected victims sometimes quarantined themselves or purposefully infected others.

Researcher Professor Nina Fefferman, from Tufts University School of Medicine in the USA, believes that studying this type of player behaviour can provide an insight into real-life reactions to disasters such as serious infectious diseases. "These games will allow us

to investigate what kinds of information could be provided to the public in these cases to curtail harmful behaviours," she told *Shopper*.

Educating the public about the best course of action could reduce panic. "I think most people are not malicious, but react when scared in ways that aren't always best. Once we are better able to understand what components of an outbreak are most likely to cause that kind of fear, and what sorts of information or action will do best to alleviate it, [we can aim to reduce] the harmful behaviours," she said.

But is it realistic to compare social interactions in a violent online game with those in real life? After all, most people would be too scared to fight with swords or expose themselves to a fatal disease in real life. "There are similarities between real-life behaviours and virtual behaviours," said Prof Fefferman, "but there are also very striking differences. People care a lot about their online selves. They can become deeply emotionally invested in their characters and in the relationships their characters have with other player characters. I think this emotional connection will help make the responses closer to those people might have in the real world."



▲ The corrupted blood disease in World of Warcraft decimated entire cities and wiped out thousands of players

YouTube slammed over Nazi film

Video-sharing website YouTube is under fire in Germany after it was found to be hosting videos featuring themes of racial hatred. These included extracts from a 1940s anti-Semitic film, *Jud Süß*, which was filmed under the supervision of Nazi propaganda minister Joseph Goebbels. Other offensive content included music videos by banned right-wing rock band Landser.

YouTube says it will remove offensive content when requested, but German youth protection organisation Jugendschutz claims that it has made such requests over 100 times and that some of the videos have been available from the site for over a year.

An investigative report by the German television network ARD revealed the scale of the problem. It found that a flood of right-wing videos, featuring Nazis, the Ku Klux Klan and 'white revolution' rallies, had recently appeared on the site.

Google, which owns YouTube, has published Community Guidelines that declare: "We encourage free speech and defend everyone's right to express unpopular points of view. But we don't permit hate speech which contains slurs or the malicious use of stereotypes intended to attack or demean a particular gender, sexual orientation, race, religion or nationality."



First looks

Every month we bring you sneak previews of the latest kit from www.computershopper.co.uk

Apple iPhone

The most hyped piece of electronics ever to exist will arrive in the UK around September 2007. We managed to get our hands on a US version of the iPhone to give you an idea of what to expect.

It's significantly slimmer than most smartphones, but you'll definitely notice its weight in your pocket. It feels built to last, even though the plastic rear cover feels a bit cheap. Most of the front of the phone is taken up by the screen, which is bright, with a very high resolution providing crisp icons and text. The operating system runs quickly, too, zipping through the various menus and applications.

The iPhone has only one control button, which takes you back to the home screen. You control the rest of the phone's functions using the touch screen. This works well, apart from the onscreen virtual keyboard. The keys are too small to make it easy to hit the right one, so you have to type with your fingernail to avoid errors. The

auto-correct feature is surprisingly good at guessing what you wanted to say, but typing is still far slower than with a proper QWERTY keyboard.

The iPhone is marketed as an "internet communication device", and the browser doesn't disappoint. It renders web pages quickly and accurately in full-screen mode. You can zoom out to view the full page, or zoom in on certain parts for a better view. You zoom in and out by pinching your fingers together or moving them apart, and scroll around the pages by dragging your finger across the screen. It works brilliantly, but the screen ends up smeared with fingerprints. We couldn't test the iPhone's voice-calling features as our device wouldn't work with UK networks.

We weren't impressed with the iPhone's keyboard, but it's a great-looking phone with a superb screen and web browser. **CF**



Belkin Certified Wireless USB Hub

Now that Certified Wireless USB devices are legal to use in the UK, we've managed to get hold of an early version of Belkin's forthcoming model. The Certified Wireless USB standard uses Ultra Wide Band (UWB) radio, which allows data to be sent between devices at a rate of up to 480Mbit/s at three metres and 110Mbit/s at 10 metres. Ofcom, the UK's telecommunications regulator, made it legal to use UWB devices without a licence from 13th August.

The hub is easy to set up and use and communicates with your PC via a dongle that plugs into a USB port. The dongle looks like many similar WiFi and Bluetooth devices.

The system isn't completely cable-free, as the hub has to be plugged into a mains power supply. However, it does reduce the number of cables plugged directly into your PC.



Early versions of this device, released in the US as the Cable-Free USB Hub, have been known to suffer connection problems at distances of over five metres. Fortunately, the version due to be released in the UK will transmit a more powerful signal, which should make it effective over greater distances.

Belkin's Certified Wireless USB Hub is likely to appeal to notebook users and to anyone who's been on the losing side of a battle with a tangled mess of cables.

The popularity of this, and other hubs that use the Certified Wireless USB standard, will depend on their cost. In the US, an early version of this device was available for around \$200 (approximately £100). This makes it quite expensive, although we'll reserve final judgement for finished products. **KO**

Commodore Gaming Commodore XX

Commodore International has licensed the Commodore name to Commodore Gaming, a company focused entirely on building gaming PCs. The top-of-the-range XX system we looked at came complete with a bright yellow C-Kin custom paint job. There are 100 C-Kin finishes available, ranging from classic games to modern titles and street art, and the paint finish is included in the price. The Jupiter Lander C-Kin has a violently contrasting yellow and black paint scheme and pixellated landing craft motif. The design divided opinion, but you can't argue with the quality of the finish, which is on a par with custom paint jobs costing hundreds of pounds.

The case is well designed, too. The front panel is on a double hinge, so it can fold flat against the side when you want access to your optical drives. This reduces the

chances of it being snapped off. The inside is neat and there are cooling fans everywhere. The large amount of cooling is perfect for overclockers, but the fans make a fair hum.

This top-of-the-range model has a terrifying specification, with a 2.93GHz Intel Core 2 Extreme X6800 processor, 2GB of RAM and twin Nvidia GeForce 8800GTX graphics cards. It also has two ultra-fast 10,000rpm hard disks in a striped RAID 0 array, and a further 500GB hard disk. All of this hardware and software is expensive, though, and this base unit costs £2,749 including VAT.

Commodore Gaming set out to build the ultimate gaming PC and it's hard to see how the Commodore XX could be any faster or flashier. If you've got the money, it's the perfect path to ultimate bragging rights. **CF**

